

SUBJECT: CURRENT AGENDA, SP1914, 1-2-57

DELIVERY

Since the first ranch delivery of FOG aircraft 361 on August 22nd, the following deliveries and flight hours have accumulated:

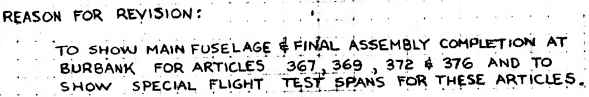
AIRCRAFT			ACCEPTED BY FOG	TOTAL FLIGHT HOURS
361	25X1A6a	x	x	206:17
362		x	x	18:19
363		x	x	30:27
364		x		3:11
365		x		
366				
367		x		
			TOTAL	:44 268:58

The attached aircraft delivery schedule has been modified to take into account the prototype programs which will be necessarily conducted by our flight test before aircraft delivery to FOG.

AIRCRAFT STATUS

At this time there are no known serious problems with the basic airplane and its components. The only exception to this seems to be the never ending oil consumption problem with the -37 engines. The autopilot is still a very sensitive piece of equipment and we are in process of going to a new mach sensor which has shown improved performance.

Aircraft 363 was weighed in order to establish a base for the FOG aircraft. This aircraft as weighed was 11,025 lbs. This actual weight corrected to the weight empty conditions given in the spec is 9910 lbs. The spec weight empty is 9897 lbs., indicating a growth of 13 lbs. because of modifications. The actual weight empty of 9910 lbs. is now reflected in all Chart C pages of Weight and Balance Data books. The actual C.G. position was also determined and is now reflected in all Chart C pages.



FLIGHT TEST PROGRAM

Enclosed is the flight test program as now anticipated for FOG aircraft. Each test subject is briefly discussed on the following pages:

1. C CAMERA

The first test of C Camera on December 21st, resulted in no pictures as the shutter was jammed closed by a loose pin. The stabilizing system was not working although the film transport operated for the whole flight.

We are undertaking the problem of putting a nitrogen bag around the configuration to include the windows. Because of the engine oil vapor problem this is the only way we believe to be practical to obtain the degree of cleanliness required for the C Camera. This nitrogen bag is being fitted into aircraft 367 at the present time.

2. DRIFT SIGHT MKI

This is installed in 367 to give flight data to the C Camera. MKII drift sight does not have this capability. Current work in progress on the MKI drift sight to make it operational includes eliminating gear back lash, cable degreasing and similar minor mechanical fixes. These modifications should make this drift sight operational although there is nothing as yet to prevent the optical power changer from jamming.

3. DRIFT SIGHT MKII

The first test of the MKII drift sight on December 21st, indicated that most of its troubles were the same old problems inherent in the MKI for the last year. Such as drift knob not movable, track knob function completely reversed or loose, prism lines are

CURRENT FOG TEST PROGRAM

	A/C	JAN	FEB	MAR	APRIL	MAY
C CAMERA	367					
D SIGHT MK I	367					
D SIGHT MK II	364					LL
AN/APQ 56	351		369			
APQ 56 RADAR	351		369			
AUTOPILOT	367					
AIR SAMPLER	343			372		
25X1X4	372					
JP-1 FUEL	FINISHED					
WEATHER RES'CH	368					7/26
SYSTEM IV	343				376	
AN/ASU-6	376					
ASU-6 RADAR	376					
SYSTEM III	376					

wide and fuzzy and power changer jammed. The addition of the servo system made the hand control free and easy to move but the field of view motion lagged the hand control and seemed to move in a circular rather than a straight path.

At this time it seems that if the MKI mechanical difficulties are cleaned up and it is made operational as it must be, then there is really no need to continue with the added complications of a servo driven system such as the MKII.

4. AN/APQ-56 and APQ-56 RADAN

This system is now operational having completed several complete flights. Further reliability tests in aircraft 351 are to be flown primarily by detachment personnel.

This system will be checked and test flown in FOG 369 when available. Note that 369 will be flight tested and waiting for the first set of the FOG APQ gear which is scheduled for March 1st. The first APQ-56 Radan is scheduled for the 1st of February and thus can be test flown prior to receipt of APQ.

5. AUTOPILOT

No production 1420H mach sensors have yet been received from

25X1A5a2 [REDACTED] First unit is expected shortly and will be installed in 367 to complement the C Camera tests.

Tests of prototype 1420 mach sensor indicate big improvement but slow delivery has hampered the retrofit program. Present

5X1A5a2 [REDACTED] schedule is five a week, starting January 11th. According to this, if present commitments are satisfied, FOG would not receive 1420H mach sensors until March 1st, 1957. This program needs watching.

25X1X4

25X1X4



8. JP-1 FUEL

CYS
WCL
This week

As a result of flight tests with twenty thousand gallons of the high and low cuts of JP-1 fuel, there does not appear to be any difference operationally with JP-1 or LF-1A. It has been checked for range, air starts, climbs and fuel tank pressures with no significant difference between the two fuels. The engine operation and full control schedules are not affected. Air starts have been made just as with LF-1A. The engine nozzle coking is the same as with LF-1A and the airplane range is unaffected. These tests, made in both -31 and -37 engines, are now considered to be finished.

The only question that can be raised here is whether or not JP-1 is any more of a fire hazard than LF-1A. We have had very good results in the past with the LF-1A from this standpoint.

9. WEATHER RESEARCH

Special weather equipment hatch and racks are being built for 368. It looks desirable to let first Radan delivery go into this aircraft and let the second go into 369 for the APQ-56 tests.

Schedule and actual test results of this aircraft depend on the availability of information and equipment to get the necessary installations accomplished in time.

10. SYSTEM IV

Hatch is ready and waiting. No delivery date for FOG System IV has been established as yet. Should meet flight test date shown for 376.

11. AN/ASN-6 and ASN-6 RADAN

This system will be incorporated into four aircraft which makes them very different internally to other FOG aircraft. Have not seen delivery schedule as yet. Need one ASN-6 set immediately for functional mock up purposes.

12. SYSTEM III

A new program is required again for System III because its antenna has been displaced by the ASN-6 Radan. This will be done on 376 while flight testing ASN-6.

MOD KITS AND SERVICE BULLETINS

We are now following service bulletin distribution requested by FOG. Copies of bulletins which affect FOG aircraft are attached. Following table indicates status of FOG aircraft with respect to these. The blocks indicate service bulletins outstanding and not accomplished on aircraft to date. Blanks indicate service bulletins which are incorporated by factory or field rework. New modifications which are about to be incorporated and retrofitted by service bulletins are:

S.B. 147 Emergency Canopy Seal Pressure Release

S.B. 148 Speed Warning

F-500 DRAWING

An up to date copy of our control drawing F-500 is enclosed which indicates our disposition of special installations to different aircraft serials.

FOU SERVICE BULLETIN STATUS

S/B #					361	362	363	364	365	366	367	368
111	DRAG CHUTE REWORK											
112	ELEV. TAB EXTENSION											
114	SUMP-WATER SEPT. DRAIN											
119	BATT. TIEDOWN REVISE											
121	INSTAL. MIL. EQ. PWR											
124	H.F. ANTENNA REMOVE											
125	M4G BOLT REPLACE											
129	MA-1 COMPASS INSTAL											
130	SYSTEM II REMOVE											
131	DRIFT SIGHT CABLE											
132	DEFU SYSTEM											
135	HATCH LATCH INDICAT											
136	OIL PRESS. XMIT RELOC											
139	DRAG CHUTE REL. MECH.											
143	FUEL VENT REST. REMOVE											